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## GOVERNMENT CROP REPORTS



Sources of Information
Methods of Preparation and Checking
Demonstrated Accuracy



Washington, D. C.

Circular 17, Revised January, 1918

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF CROP ESTIMATES
LEON M. ESTABROOK . . . . Chief

### ORGANIZATION AND OFFICIALS OF THE BUREAU OF CROP ESTIMATES.

Statistician and Chief: Leon M. Estabrook. Assistant Statistician and Assistant Chief: Nat C. Murray.

Chief Clerk: Charles E. Gage.

Division of Crop Reports: Edward Crane, Chief.

Division of Crop Records: Frank Andrews, Chief.

Field Service: S. A. Jones, Chief.

Statistical Scientists: George K. Holmes, Charles M. Daugherty, and Fred J. Blair.

Crop Reporting Board: Leon M. Estabrook, Chairman; Nat C. Murray, S. A. Jones, Frank Andrews, George K. Holmes, and one or more field agents called in from the field force.

#### GOVERNMENT CROP REPORTS.

CROP ESTIMATES which are reliable and unbiased are important not only to agriculture but also to all those industries which depend upon agricultural products. Public appreciation of accurate crop reports is increasing, owing largely to improved methods of marketing and distribution, and to a wider public interest in food and feed which has developed since the beginning of the European War. The following statement gives the essential facts regarding the organization of the Bureau of Crop Estimates, its sources of information, and the accuracy of its crop estimates.

## THE MEN WHO SUPPLY INFORMATION ABOUT CROPS.

Systematic care and scientific thoroughness characterize the preparation of the Government crop reports, but these would be useless without an efficient organization and dependable sources of information.

The Washington force.—To begin with, the central office of the Bureau of Crop Estimates, at Washington, has approximately 135 employees, most of them statistical clerks, computers, and trained statisticians experienced in handling and interpreting agricultural facts,

from whatever source they may be gathered.

Field agents.—Distributed over the country are 42 salaried field agents, one in each State or group of small States. These field agents are in the classified civil service and are appointed only after passing a rigid civil-service examination to test their educational and statistical qualifications. Before they are permitted to take the civil-service examination they must show that they have had at least five years' practical experience in farming, an education equivalent to a four-year course in an agricultural college or at least three years' responsible practical experience in work involving statistical methods or statistical inquiry. They must also be legal residents of the States to which they are assigned. These agents are all men of high character, qualified by training and experience for their work, competent judges of crop

production, and familiar with local conditions in their States. Each is required to travel over his State systematically during the crop season and personally to inspect crops, interview farmers, representatives of commercial houses, mills, elevators, buying and selling associations of all kinds, transportation companies, State and local authorities, and associations of every description; in fact, each is expected to be better informed on crop production than any other man in the State. Each agent enlists the voluntary services of from 250 to 1,500 selected crop correspondents in his State, who report to him every month regarding the crops grown in the State. At the close of each month the agent makes up a detailed estimate on the crops in his territory and forwards it to the Washington office, with full explanatory notes showing the causes which have resulted in changes from the estimates for the previous month. The field agent, because of his constant travel and observation, his thorough study and analysis, and his interviews with and continuous reports from many of the most competent judges of crops, has a thorough knowledge of the crop situation in his State.

Crop specialists.—In addition to the regular field agents, the bureau employs 10 crop specialists, 1 each for cotton, rice, and tobacco, 4 for truck crops, and 3 for fruit crops. These crop specialists are of the same high character, experience, and educational qualifications as the field agents, and each devotes his entire time to investigating the single crop for which he is responsible. They travel throughout the regions in which their special crops are grown, maintain large lists of growers, and each is regarded as an authority on the statistics of his special crop. Lists are kept of growers of special crops, who report at the close of each month to the respective crop specialists, each of whom, in turn, makes up a report and forwards it to the central office in Washington.

County crop reporters.—A third class of reporters are the voluntary county crop reporters, approximately 2,800 in number, each of whom reports for his county each month on printed schedules directly to the bureau. The county reporters base their estimates upon personal observation and inquiry and upon written and telephonic reports to them from aids in different portions of the county.

Township crop reporters.—A fourth source of information is the voluntary township reporters, one for each agricultural township in the United States, approximately 30,220 in number. These township reporters are nearly all practical farmers and each reports on the crops grown in his immediate neighborhood directly to the central office in Washington monthly throughout the year.

Special lists of growers, buyers, and others.—Additional sources of information exist in the bureau's special lists of growers of potatoes, apples, cotton, beans, cranberries, peanuts, broom corn, maple sirup, honey, special truck crops, and live stock, and in other lists of buyers, dealers, mills and elevators, producers and shipping associations, and other agencies engaged in the handling, transporting, storing, and distribution of crops.

The total number of voluntary crop reporters is approxi-

mately 150,000.

#### HOW THE CROP INFORMATION IS TABU-LATED IN WASHINGTON AND THE CROP REPORTS MADE UP.

The returns from each class of reporters are tabulated and averaged separately as a check one against the other. The county totals are weighted; that is, a county which produces five times as much of a particular crop as another receives five times the importance or "weight" of the other county in determining the average for that crop.

Every possible precaution is taken to prevent the totals for any of the so-called speculative crops, such as com, wheat, oats, barley, rye, and cotton, from becoming known to any individual prior to the date fixed in advance by the Secretary of Agriculture for the issuance of the crop report. Even the tabulators and computers who make up the totals do not know the States to which they pertain, and the final telegraphic reports and comments of the field agents relating to the speculative crops are kept locked in the office of the Secretary until cropreporting day, when they are turned over to a Crop Reporting Board, and the entire board is immediately locked in until the minute that the report is issued, guards being stationed at the doors, and all telephones disconnected.

The data supplied by the field agents, crop specialists, and various classes of voluntary crop reporters are considered by the Crop Reporting Board, composed of the chief of bureau, the assistant chief of bureau, the chief of the division of crop reports, two statistical scientists, and one or more field agents called in from different States each month, all of whom are expert judges of crops and have had many years' experience in analyzing, interpreting, and summarizing crop data. In addition to the special data sent in each month by the field force, the Crop Reporting Board has all other data which are available, such as the Weather Bureau reports, and such crop reports as are issued by State authorities, private crop-estimating agencies, associations, and others. From all these data each member of the board prepares his own individual and independent estimate for each crop and State. These are compared, discrepancies are discussed and explained, and a final figure is adopted by the board. It is quite certain, therefore, that the Crop Reporting Board has before it more complete, detailed, and accurate data upon which to base its report than any other crop-estimating agency in the world. The members of the Crop Reporting Board are unbiased, because they, as well as all other employees of the department who have anything to do with the crop estimates, are prohibited by law, under very severe penalties, from speculating in any product of the soil, from giving out any information in advance of the official crop report, and from knowingly compiling or issuing any false statistics.

# HOW REPORTS OF OTHER AUTHORITIES PROVE THE ACCURACY OF THE CROP REPORTS.

Wherever it is has been possible to secure an absolute check, the crop reports of the Department of Agriculture have usually been found to be surprisingly accurate. Unfortunately, absolute checks are afforded at only long intervals or for only a few crops, or for only a few States. The principal checks which are available are as follows:

The census reports every 10 years.—The census reports afford the most complete and authoritative crop statistics available. They are especially valuable because they cover acreage and production of all crops and different

classes of live stock. Theoretically they are actual enumerations and are presumed to be accurate. Actually, so far as they relate to agriculture, they are estimates, though based upon a larger number of returns than the crop reports of the Bureau of Crop Estimates. Their value is impaired somewhat by the long period of time between censuses, the delay in printing the reports after a census is taken, the different dates of reporting numbers of different classes of live stock, and the fact that different methods of editing (correcting or omitting imperfect returns) are adopted at different censuses. Because of the imperfect returns and methods of dealing with them, the agricultural totals of the census of 1900 were generally too high or those of the census of 1910 were generally too low. The deficiencies of the last census are recognized and discussed by the Director of the Census in his annual report for 1912. A comparison of the estimates of the Bureau of Crop Estimates with the past census shows that they are in closer agreement than are the crop reports or tax assessors' returns in most of the States, and certainly far more nearly in agreement than the estimates made by private agencies.

The annual census reports of cotton ginned.—The Bureau of the Census is required by law to report every bale of cotton that is ginned. These reports, therefore, afford an absolute check on the estimates of the Depart-

ment of Agriculture for cotton.

Reports of State boards of agriculture and returns of tax assessors. - Many of the States have boards of agriculture or commissioners of agriculture who issue crop reports at various intervals, and some of the States have tax assessors' returns of crops and live stock. These reports and returns would be extremely valuable as checks upon the crop estimates of the Department of Agriculture if they covered all crops and classes of live stock, if they were based upon complete and accurate data, if they were systematically prepared by competent, well-trained, and experienced statisticians, if they were issued every year and promptly, and if the returns were made as of the same day in all the States. Unfortunately this is not the case. Though in a few of the States an attempt is made to meet the standard indicated, in most of the States the tax assessors' returns are incomplete, are rendered after long delays, and relate only to certain crops and omit certain classes of live stock. The

returns in different States are made on different dates, and in some States the returns are not published at all or not until long after the close of the crop year to which they pertain. In most of the States the officials in charge of the crop statistics are not selected because of any special fitness for the work, and in practically all of the States the personnel is subject to frequent changes. The fact that the State reports can not be used as a satisfactory check upon the crop estimates of the Department of Agriculture is readily apparent by comparing them with the decennial census. However, while the crop totals reported in some States can not be accepted as numerically accurate, they are of value in showing the trend of crop acreages and production from year to year; i. e., they show in a general way whether the acreages planted to different crops and the numbers of different classes of live stock on farms are increasing or decreasing from year to year, and to what extent they can be used as a check upon the estimates of the Department of Agriculture. All crop reports and statistics issued by State authorities are obtained as soon as published by the Bureau of Crop Estimates, and the totals of the tax assessors' returns are taken off from the State records by the field agents of the bureau annually. These reports and tax data are carefully analyzed and checked against the Government reports by the Crop Reporting Board.

Private estimating agencies.—A number of private crop-reporting bureaus make a business of preparing estimates of the acreage and production of the so-called speculative crops, corn, wheat, oats, rye, barley, and cotion, and a few other crops, and many of the larger firms which deal in these products employ crop experts at high salaries to keep them supplied with timely crop information. Many producing associations which are interested in special crops, such as apples, peaches, potatoes, and the like, also prepare estimates from time to time based on reports of their members. A number of farm journals and trade papers also publish crop estimates of their owr, based upon various sources of information, principally from their subscribers. Though many of these agencies employ men who are experienced in judging crops and their estimates frequently are very accurate, it is nevertheless true that few, if any, of them have the facilities for collecting reliable data of crop production at all comparable with those of the Bureau

of Crop Estimates, and their estimates often show the effect of bias. Practically all of these estimates are available to the bureau, either directly or through its field agents, frequently before publication. They are deemed of value as representing the consensus of opinion of the "trade" and in most cases tend to confirm the accuracy of the Bureau of Crop Estimates.

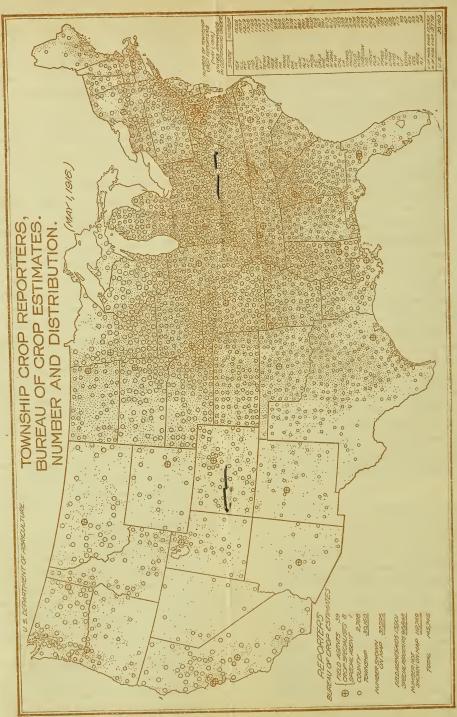
Returns from mills, elevators, and storage warehouses.— If complete returns were available for quantities of grain, apples, potatoes, etc., stored in all the mills, elevators, and warehouses of the country during the season, they would afford an excellent check upon estimates of crop production, but such returns as are available are very incomplete. Some State laws require that products held in storage shall be reported periodically to the State authorities, and where such reports are available they are utilized by the Bureau of Crop Estimates. Unfortunately many States do not require the reporting of products in storage, and there is no way of ascertaining the quantities held in those States. The Bureau of Markets in the Department of Agriculture is rapidly developing a system of ascertaining and reporting quantities of perishable products, such as apples, potatces, meats, butter, and eggs held in storage warehouses. The reports issued by the Bureau of Markets will become increasingly valuable as checks on estimates of production.

In the case of rice, the mills which handle all of this product that is not retained by growers for seed are comparatively few in number, and it is possible to make a complete canvass of them. Their total receipts in any year plus a conservative estimate of the quantity retained by growers for seed make an excellent check on the estimate of production.

Beet-sugar factories, likewise, are comparatively few in number, handle practically all the sugar beets produced in the country, and keep accurate records of sugar-beet acreage and production. The bureau obtains reports from practically every beet-sugar factory in the United States. Its estimates of acreage and production are almost equivalent to an actual census, and are accepted by the trade as highly accurate.

Crop movement.—Reports of the various transportation companies to State and national authorities of the movement of grain and other farm products are of value as indexes only, not of total actual crop production but of

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surpluses available for distribution through commercial channels. Though a large percentage of the wheat crop (60 per cent) moves out of counties where grown, it is estimated that only about 20 per cent of the corn crop, 30 per cent of the oat crop, and 40 to 50 per cent of the apple crop, and similarly for other crops, is handled commercially, the remainder being consumed on the farms or in the counties where grown. It is manifestly impracticable to use such reports of crop movement as are available as a satisfactory check on crop production, but in the manner indicated such reports are of value as indexes of crop surplus from year to year.

Exports.—Fairly accurate statistics of exports of farm products, especially of grain, cotton, and animal products, are furnished by the Department of Commerce. As in the case of transportation statistics, exports are of value as indexes of crop surplus, but are of little value in deter-

mining total crop production.

Prices.—Average monthly farm prices, which are easily ascertained and which are of record in the Bureau of Crop Estimates for a long series of years, afford one of the best indirect checks on crop production. The law of supply and demand, like the law of gravity, operates universally. Fluctuations in prices are usually proportional to variations in supply, except in cases where the normal operation of the law of supply and demand is interfered with by special causes, which can usually be ascertained. A study of average farm prices in the different States in relation to the estimated crop production will nearly always confirm the approximate accuracy of the estimates.

## HOW REPORTS ON PARTICULAR CROPS ARE CHECKED UP.

Cotton is the only crop for which a complete and absolute check is afforded annually, namely, by the census report on ginnings. Comparison with these for the past two years shows that the cotton estimates of the Bureau of Crop Estimates were accurate to within less than 1 per cent. In the case of rice and sugar beets, which can be checked by a canvass of all the rice and beet-sugar mills, the estimates were accurate to within less than 1 per cent. Tobacco estimates are checked annually against the records of the Bureau of Internal Revenue and are accurate to within a few per cent.

In the case of no other crops do satisfactory checks exist. Statistics which appear in the press, in State reports, reports of commercial bodies, and other publications, on crops other than those mentioned, so far as they are not based on the census, or on the reports of the Bureau of Crop Estimates, are frequently more or less incomplete, and often inaccurate or otherwise defective. In fact, the estimates of the bureau are the foundation for many of the crop reports and statistics of commercial bodies and private estimating agencies. The Government reports generally are accepted as accurate by those who are well informed or who have occasion to collect or study crop statistics.

Existing means of checking reports on particular crops are set forth under separate headings.

#### CORN.

No satisfactory annual check for the corn crop is available. The only complete check is the estimated acreage and production reported every 10 years by the Census Bureau. Only a few States estimate the corn production, and even these reports are not based on as complete returns or on as thorough study and scientific methods as the estimates of the bureau. Incomplete reports of the movement of the 20 per cent of this crop which leaves the county where grown, and statistics of the very small percentage of the crop which is manufactured or exported, serve only as indexes of surpluses available for commercial purposes. The average farm price of corn is probably the best check available, but this is necessarily imperfect.

#### WHEAT.

No complete annual check for the wneat crop is available, although, as the bulk of the crop enters commercial channels, a partial means of confirmation of the accuracy of the bureau's estimates is afforded by such statistics as are available with respect to crop movement, receipts at primary markets, and exports. The only complete check is the estimated acreage and production every 10 years by the Census Bureau. State reports cover only a portion of the wheat-producing region and are often unsatisfactory. Estimates of private agencies are imperfect and not authentic.

OATS, RYE, BARLEY, BUCKWHEAT, AND HAY.

Oats, rye, barley, buckwheat, and hay are in the same position as com with respect to means by which the crop estimates may be checked.

#### RICE.

The acreage and production of rice can be verified every 10 years by the census. As all rice which is not retained on farms for seed passes through rice mills and as the mills are comparatively few in number, it is possible to check rice receipts at mills and to estimate the amount required for seed against the estimated production. The bureau's estimate of the rice crop in December, 1915, was 28,947,000 bushels. Because this estimate was severely criticized as being from 6 to 10 per cent too large, a thorough canvass of all the rice mills was made in 1916, requests being sent to them to report their receipts of rough rice from the crop of 1915. Returns were received from every rice mill of importance in the United States. The amount of the 1915 rice crop reported by mills as having been received by them, plus a conservative estimate of the amount of rough rice for seeding the 1916 crop, was 28,995,000 bushels, indicating that the bureau's estimate was accurate to within less than 1 per cent. The items are shown in the following statement:

The 1915 rice estimate compared with receipts of rice mills.

Total mill receipts of rough rice in bushels of 45 pounds each	Bushels. 27,396,991
Seeding requirements for year 1916, approx-Bushels. imately	
Mills reporting (estimate for one) show sales	
for seed of	
Leaving to be furnished by local elevators or retailed by farmers, for seed	1,542,222 56,000
Thus accounting definitely for a total of	28,995,213
Total production as estimated by Bureau of Crop Esti-	
mates in December, 1915, was	28,947,000
Showing an excess over the bureau's estimates of	48,213
Or about two-tenths of 1 per cent.	

<sup>&</sup>lt;sup>a</sup> East of the Mississippi River, production was estimated at about 160,000 bushels; of this, 104,000 bushels were received by mills or used for seed, and 56,000 bushels were consumed locally.

#### COTTON.

Cotton is the only crop for which a complete and satisfactory annual check is furnished, namely, by the census report of cotton ginning. For two years in succession, in 1914 for the largest crop ever produced, and in 1915 for the smallest crop produced in many years, the estimates of the Bureau of Crop Estimates in December came within less than 1 per cent of the total final ginnings reported by the census in the following March.

This is brought out in the following table, which gives the number of pounds of lint cotton (net weight) as estimated in December, annually, by the Department of Agriculture, and the number subsequently reported by the Bureau of the Census, for each of the seasons 1900–1 to 1916–17, inclusive, together with the percentage overestimated or underestimated by the Department of Agriculture each season.

Bureau of Crop Estimates' figures on the cotton crop compared with the ginning figures of the Bureau of the Census.

	Pounds of omit	cotton (000 ted).		
Crop year.	Estimated by Department of Agriculture.	Finally reported by Census Bureau.	Over- esti- mated.	Under- esti- mated.
			Per	Per
			cent.	cent.
1900-1	4.856.738	4,846,471	0.2	
1901-2	4.529,954 5.111,870	4,550,950 5,091,641		0.5
1902–3 1903–4	4.889.796	4.716.591	.4 3.7	
1904–5	6.157.064	6.426.698	3.7	4.2
1905-6	4,860,217	5.060.200		4.0
1906-7	6,001,726	6,354,110		5.5
1907-8	5,581,968	5,312,950	5.1	
1908–9	6,182,970	6,336,070		2.4
1909-10	4,826,344	4,783,220	.9	
1910-11	5,464,597 7,121,713	5,551,790 7,506,430		1.6 5.1
1911-12	6.612.335	6,556,500	.9	
1912–13 1913–14	6,542,850	6,772,350	.7	3.4
1914-15	7.637.113	7.718.980		1.7
1915–16	5.338,588	5,354,406		3
1916-17	5,506,896	5,480,012	4	
17 years, 1900-1916	97.222.739	98,419,369		1.2
5 years, 1912-1916	31,637,782	31,882,248		.8
3 years, 1914–1916	18,482,597	18,553,398		.6

#### POTATOES.

No complete and satisfactory check exists, except the census every 10 years. A few of the principal potatogrowing States publish reports on this crop based upon data which are less complete than those possessed by the Bureau of Crop Estimates. In a few important pro-

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ducing sections, such as Aroostook County, in Maine, and the trucking regions of the Eastern Shore of Maryland and Virginia, the commercial movement of potatoes is sufficiently large to form a fairly good check on the production in those sections. The private estimates of some of the producers' associations are also of value in confirming the accuracy of the bureau's estimates. However, no complete annual check on potato production is available, the most satisfactory one being the annual variation in prices, which indicate larger or smaller production in each State, and to that extent verify the estimates of the bureau.

#### TOBACCO.

Aside from the decennial census, the best annual check is afforded by the records of the Bureau of Internal Revenue. Private estimates of the "trade" and average farm prices, taken in connection with the records of the Internal Revenue Bureau, are also considered in verification of the estimates. These estimates are exceedingly accurate, usually within a few per cent of the figures of the Bureau of Internal Revenue.

#### SUGAR BEETS.

In addition to the check afforded every 10 years by the census, the bureau is able to check its estimates annually with data obtained from all the beet-sugar factories, which are few in number and handle the entire crop, so that the inquiry practically amounts to a census. The estimates are regarded as highly accurate.

#### APPLES AND PEACHES.

The census affords a check every 10 years on production and reports the number of trees of bearing and non-bearing age. The reports of transportation and storage companies and warehouses, and various growers and shipping associations, offer fairly reliable data as to the commercial crop. There is no reliable check on the large percentage of these crops which is consumed in counties where grown. The present organization of the Bureau of Crop Estimates includes three fruit-crop specialists who devote their entire time to estimating apples and peaches. At present, fluctuations in the average price afford the best verification of the bureau's estimates.

#### TRUCK CROPS.

There is no annual check on the accuracy of the bureau's estimate of production of truck crops. The best annual checks on the size of the various truck crops are prices and data supplied by the transportation, storage, and canning companies. The data collected by the Bureau of Markets will become of increasing value as its work is developed and its methods are perfected.

#### LIVE STOCK.

The only checks upon the accuracy of the bureau's annual estimates of numbers of different classes of live stock are the decennial census, tax assessors' returns in some States, commercial movement, and receipts of meat animals at stockyaids, and average prices.

#### SCOPE OF INFORMATION CONTAINED

[Key; (A) Acreage; (%a) acreage in per cent of last year; (b) number of breeding exposure; (F) final estimates (acreage, production, value); (f) per cent of crops (l) cut for silos; (m) per cent of crop of merchantable quality; (n) number; (P) pro after abandonment; (s) supplies on farms; (v) values—prices of products marked per acre—or colony.]

Cerealst   Bailey	Crop.	Jan.	Mar.	Apr.	May.	June.
Barley	Clo					
Buckwheat.	Rarley	v- -	sf			Ac
Oats	Buckwheat	v+				
Rice	Com				• • • • • • • • •	· · · · · · · · · · · · · · · · · · ·
Nyear   Nyea			51			
Nation   N	Rye			С	rc	
Nation   N	Wheat (all)	v+	sf			
Nation   N	Wheat (spring)			• • • • • • • • • • • • • • • • • • • •		
Altalia, seed,	Forage (grasses):			C	ic	C
Altalia, seed,	Alfalía, hay					%ac
Clover seed	Alfalfa, seed	v+				
Field peas.	Clover, hay					
Milet	Field peas	V T			c	
Milet	Hay (all)	v+				С
Milet	Hay (tame)					
Meadows	Hay (wild)					
Millet	Meadows	V T			С	
Pastures	Millet					
Timothy, hay	Pastures		С	С	С	С
Apples	Timothy, hay	v+				
Cranberries   Cranberries   Cranberries   Cranpefruit, Florida   v+ c c c c c c c   Carapes   Carapes   Carapes   Carapes   California   v+ c c c c c c c   Calimes, Florida   v+ c c c c c c c   Calimes, Florida   v+ c c c c c c   Calimes, California   v+ c c c c c c   California   California   v+ c c c c c c   California   Cal	Apples	v+				С
Cranberries   Crapefruit, Florida   V+	Apricots, California				С	
Cranberries   Crapefruit, Florida   V+	Black and rasp berries					
Lemons, California					С	С
Lemons, California	Grapefruit, Florida	v+	С	С	С	С
Pears	Grapes					
Pears	Lemons, California	v+				
Pears	Olives California	V+	c	c	С	
Pears	Oranges	v+	С	С	С	
Pineapples, Florida	Peaches					
Beans (lima), California	Pears	v				
Beans (lima), California	Primes California			C	С	
Beans (lima), California	Watermelons				С	
Celety California   C   YeP   C   C	Vegetables:					
Celety California   C   YeP   C   C	Beans (dry)	v+				
Celety California   C   YeP   C   C	Cabbages	v+	С	С		
Celety California   C   YeP   C   C	Cauliflower, California			c ~	%p	
Polatoes	Celery, California		С	%P		
Polatoes	Onions	ν+				c
Sweet potatoes	Potatoes	sv+	c	С	С	
Miscellaneous: Almonds, California. Broom corn V+ Cotton V+ Flaxseed V+ Hemp. C C Honey V+ Hops. V+ Peanuts Planting. Plowing. Sorghum (for sirup) Sugar beets Sugar cane Tobacco. Walnuts (English), Cal Wool V+ Live stock: Horses Ny Milch cows NY Milch co	Sweet potatoes	v+				
Almonds, California.	I omatoes		С	С	С	
Broom corn.	Almonds, California				с	С
Hemp.	Broom com	v+				
Hemp.	Cotton	v+				С
Honey	Flaxseed					
Planting	Honey	v+				
Planting	Hops	v+				
Plowing	Peanuts	v+				
Sorghum (for sirup)   C   Sugar bets   C   C   Sugar cane   C   Sugar ca	Planting				69	
Sugar cane	Sorohum (for sirup)				70	
Note	Sugar beets					
Note	Sugar cane				· · · · · · · · · · · ·	%ac
Wool.         v+           Live stock:         Horses.           Horses.         nv+           Mulcs.         nv+           Milch cows.         nv+           Other cattle.         nv+           All cattle.         dec           Sheep.         nv+         dec           Lambs.         v+         de           Swine.         nv+         dcb	I obacco					С
Note   Note   Note	Wool	v+				
Mules         nv         de           Milch cows         nv +            Other cattle         nv +         dec           All cattle         dec            Sheep         nv +         de           Lambs         v +         de           Swine         nv +         dcb	Live stock:					
Other cattle.         nv +         dec           All cattle.         dec         dec           Sheep.         nv +         de           Lambs.         v +         de           Swine.         nv +         dcb	Mules			} dc		
Other cattle.         nv +         dec           All cattle.         dec         dec           Sheep.         nv +         de           Lambs.         v +         de           Swine.         nv +         dcb	Milch cows					
All cattle dec Sheep nv+ dec Lambs v+ de Swine, nv+ dcb	Other cattle					
DWING 11VT	All cottle					
DWING 11VT	Sheep					
	Swine					
	Honey bees, colonies				nc	
Note.—Reports of prices are also obtained monthly for butter, eggs, chickens, mill						

Note.—Reports of prices are also obtained monthly for butter, eggs, chickens, milk, ary, February, October, November, and December; for black walnuts, hickory nuts, corn in January, February, November, and December; for maple sugar and sirup in March.

#### IN THE SEVERAL CROP REPORTS.

sows compared with last year; (c) condition; (d) losses from disease; (e) losses from shipped out of county where grown; (h) number stock hogs compared with year ago, duction; (%p) per cen of full crop produced; (q) quality; (r) acreage remaining (y+) in January are asked each month; (w) weight per bushel, or fleece; (Y) yield

July.	Aug.	Sept.	Oct.	Nov.	Dec.	Crop.
	-	-				
	sc	С	Pq		E	Cereals: Bailey.
С	Ac	c	c	Pq	F	Buckwhea
Ac	c	c	c	sPql	F F F F F F	Corp.
c Ac	sc	С	Pq	w	F	Oats. Rice.
Ac c	APq	С	С		qr AcF	Rice.
8	Arq				F	Rice. Rye. Wheat (all). Wheat (spring). Wheat (winter). Forage (grasses): Alfalfa, hay. Alfalfa, seed.
C	С	С	Pq	w	F F	Wheat (spring).
С	Pq			w	AcF	Wheat (winter).
c	С	Y%p				Alfalfa hav
	J	* /CP	Ү%р			Alfalfa, seed.
c	Y%pq					Alfalfa, seed. Clover, hay. Clover seed.
c	с	%ac	C	Y%p		Clover seed. Field peas.
C	Ac	c P	C	%p		Hay (all).
	A	Pa			F	Hay (all). Hay (tame). Hay (wild). Kafirs, etc.
	A	Pq		3707	F	Hay (wild).
С	С	С	С	Y%p	F	Meadows.
С	С	С	%p			Millet.
c	С		c			Pastures.
%ac	С	Y%p				l imothy, hay.
С	c	с	c	%pg	Ff	Fruits:
c	07cD			/cP4		Apples. Apricots, California.
С	%p %p					Black and rasp berries.
С	С	%p		320-		Cantaloupes.
c	c	c c	c c	Y%pq	F Y%pg	Cranberries. Grapefruit, Florida.
c	cv	cv	cv	%pgv	v	Grapes.
c	С	c	С	С	Y%pq	Lemons, California.
С	С	С	С	С	%pq	Limes, Florida. Olives, California.
C C	c c	c c	c c	c c	VOT DO	Olives, California. Oranges.
cv	cv	%pgv	v		%pq %p Y%pq F Fv	Peaches
С	cv	cv	cv	%pqv	Fv	Pears.
cv	%pv	V	V C	V		Pears. Pineapples, Florida. Prunes, California.
C	c	c %p	%p			
"		70P				Vegetables:
С	С	С			F	Vegetables: Beans (dry). Beans (lima), California.
C	С	С	%p Y%p		• • • • • • • •	Beans (lima), California.
C	С	С	1 %p		• • • • • • • •	Cappages.
						Cauliflower, California. Celery, California.
С	С	С	%p Y%p			Field beans.
c Ac	c c	C C	Y%p	Pq	····	Onions.
Ac	c	c	c	Pg	F	Potatoes. Sweet potatoes.
cv	cv	cv	%pv			Tomatoes.
	1			~		Miscellaneous:
C	C C	C C	Yorn	%P	F	Almonds, California.
Ac	c	c	Y%p		rP	Broom corn. Cotton.
Ac	c	С	Y%p	Pq	Ê	Flaxseed.
С	c Y	С	Y%p			Hemp. Honey.
c	C C	с	Yq		F	Honey. Hops.
c	c	c	c	Y%pq		Peanuts.
						Planting. Plowing.
07						Plowing.
%ac	c c	c c	c c	r c		Sorghum (for sirup). Sugar beets.
c	С	c	c	c 1	%p	Sugar cane.
Ac	С	С	С	Pq	%p F	Sugar cane. Tobacco.
C	c	C /	cv	%pv	v	Walnuts (English), Cal.
w		%p				Wool.
						Live stock:  {Horses.  Mules.
		•••••				(Mules.
						Milch cows.
	•••••					Other cattle.
						All cattle. Sheep.
						Lambs.
		he				Swine.
		• • • • • • •		• • • • • • •		Honey bees, colonies.
1 1						

vealcaives, timethy seed, cotton seed, cottonseed meal, and bran; for soy beans in Janupecans, and turkeys in January, October, November, and December; for turnips and pop-April, May, and June, and for chestnuts in October, November, and December.

